Blast Result

4/15/03 12:07 PM



Blast 2 S qu nc s results

Entrez

BLAS'

OMIM

Taxonomy

Structure

BLAST 2 SEQUENCES RESULTS VERSION BLASTP 2.2.5 [Nov-16-2002]

Matrix BLOSUM62 | gap open: 11 gap extension: 1 x dropoff: 50 expect: 10.00 wordsize: 3 Filter Align

Sequence 1 gi 3702836 hASIC3 [Homo sapiens] Length 531 Sequence 2 gi 13592019 P2X3 [Rattus norvegicus] Length 397 N significant similarity was found

4/15/03 12:05 PM

Align two sequences

Tue Apr 15 17:04:02 BST 2003

>gi 135 >gi 370 scoring	2836 gb # matrix:	NP_1123 AC62935. , gap pe	37.1 P2 1 hASIC enalties	X3 [Rattu 3 [Homo sa	ipiens],	397 aa va 531 aa	3 .
			10	21	0	30	40
/usr/t	MNCIS	D	FFTYETTK	SVVVK	SWTIG	INRAVQLLI	ISYFVGW
				:			
g1 370		earropsd: 10	IRVFASNO 20	SMHGLGHVFG 30	PGSLSLRRGI 40	MAAAVVLSV. 50	ATFLYQV 60
•		LO	20	30	40	30	00
		50		60		70	
/usr/t	V	-FLHEKAY	QVRDT	AIESSVVTKV	KGFGR	YANRV	
	*						
g1 3/U		EFHHQTAL 70	80 80	VFPAVTLCNI 90	NPLRRSRUT 100	PNDLHWAGSA 110	LLGLDPA 120
		70	60	90	100	110	120
	80		90	100	110	120	130
/usr/t	DYVT	PPQGT		(I IVTENQMQG			PERFPGG
gi 370				FDMAQLYARA			PENFTTI
	1	30	140	. 150	160	170	•
	1	140		150		*	
/usr/t GILTGRCV		myss	VLRTC-		EIQG	MCE	TEVD
		:	.::		:	: :	
				RGGMGNGLDIN			FEVGIRV
1	80	190	200	210	220	230	
	160		170	180	1	190	200
/usr/t		'IMME	ZENET				
				TFIKNSII	REPT.FNF	EKGNIJ PNIJ	'わがわてがたた
	. : :			IFIKNSIF		EKGNLLPNLI	DKDIKRC
gi1370		PIIDQLGL	GVSPGYQ		: : .	: ::	
•		PIIDQLGL		:	: : FLPPPWGDC	: ::	
•	QIHSQEEE 40	PPIIDQLGL 250	GVSPGYQ 260	revscoools 270	: : . SFLPPPWGDC 280	: :: SSASLNPNY- 290	EPEPSDP
2	QIHSQEEE 40 210	PPIIDQLGL 250	GVSPGYQ1 260	:: rfvscqqqqus 270	: : . SFLPPPWGDC 280 240	: :: SSASLNPNY- 290 250	EPEPSDP
2 /usr/t	QIHSQEEE 40 210 RFHPEKAI : .:	PPIIDQLGL 250 22 PFCPILRVG	GVSPGYQ 260 0 GDVVKFAG	rfvscqqqqls 270 230 QDFAKLARTG	: : . SFLPPPWGDC 280 240 GVLGIKIGW-	SSASLNPNY- 290 250 VCDLDKAV	EPEPSDP 260 IDQCIPKY
2 /usr/t	QIHSQEEE 40 210 RFHPEKAI : .:	PPIIDQLGL 250 22 PFCPILRVG	GVSPGYQ 260 0 GDVVKFAG	rfvsc <u>ooo</u> ls 270 230 2DFaklartgo	: : . SFLPPPWGDC 280 240 GVLGIKIGW-	SSASLNPNY- 290 250 VCDLDKAV	EPEPSDP 260 IDQCIPKY
2 /usr/t	QIHSQEEE 40 210 RFHPEKAI : .:	PPIIDQLGL 250 22 PFCPILRVG	GVSPGYQ 260 0 GDVVKFAG	::. IFVSCQQQQLS 270 230 QDFAKLARTGO .:: ET-RYVARKCO	: : . SFLPPPWGDC 280 240 SVLGIKIGW- : GCRMVYMPGE	SSASLNPNY- 290 250 VCDLDKAV	EPEPSDP 260 IDQCIPKY
2 /usr/t	QIHSQEEE 40 210 RFHPEKAI : .: LGSPSPSI 300	PPIIDQLGL 250 22 PFCPILRVG	GVSPGYO 260 60 60 60 60 60 60 60 60 60 60 60 60 6	TFVSCQQQQLS 270 230 QDFAKLARTGO ET-RYVARKCO 3	: : . SFLPPPWGDC 280 240 SVLGIKIGW- GCRMVYMPGE 30	SSASLNPNY- 290 250 VCDLDKAW ::.	260 IDQCIPKY .; KKNC
2 /usr/t gi 370	QIHSQEEE 40 210 RFHPEKAI : .: LGSPSPSI 300	PPIIDQLGL 250 22 PFCPILRVG 5: 2SPPYTIMG 310	GVSPGYQ 260 :0 :DVVKFAG :CRLAC 320	TFVSCQQQQLS 270 230 QDFAKLARTGO ET-RYVARKCO	: : . SFLPPPWGDC 280 240 240: SVLGIKIGW- GCRMVYMPGE 30 30	250 250 250 VCDLDKAV ::. DVPVCS-PQQY	260 VDQCIPKY .; KNC 350
2 /usr/t gi 370	QIHSQEEE 40 210 RFHPEKAI : .: LGSPSPSI 300	PPIIDQLGL 250 22 PFCPILRVG 310 270 VSEKSSVS-	GVSPGYO' 260 GDVVKFAGG 320 280PGYNF	TFVSCQQQQLS 270 230 QDPAKLARTGO ET-RYVARKCO 0 33	: : . SFLPPPWGDC 280 240 SVLGIKIGW- GCRMVYMPGG 30 290 -ENGSEYRTI	SSASLNPNY- 290 250VCDLDKAW ::. DVPVCS-PQQY	260 VDQCIPKY .; KNC 350
/usr/t gi 370 /usr/t	QIHSQEER 40 210 RFHPEKAN :	PPIIDQLGL 250 22 PFCPILRVG 310 270 VSEKSSVS-	GVSPGYO 260 0 SDVVKFAG 320 280 PGYNF	TFVSCQQQQLS 270 230 QDFAKLARTGO ET-RYVARKCO	: : . SFLPPPWGDC 280 240 SVLGIKIGW- : . GCRMVYMPGI 30 3 290 -ENGSEYRTI	250 250 VCDLDKAV ::. DVPVCS-PQQY	260 NDQCIPKY .; ZKNC 350

Sequence Alignment Output

4/15/03 12:05 PM

320 330 310 /usr/t FGIRPDVLVYGNAGK-----FNIIPTIISSVAAFTSVGVGTVL-----CD11---LLN g11370 LDIFFEALNYETVEQKKAYEMSELLGDIGGOMGLFIGASLLTILEILDYLCEVFRDKVLG 430 440 450 370 350 360 /usr/t flkgadhykarkfeevtettlkgtastn-----PVFASDQATVEKQSTDSG--AYSIG qi|370 YFWNRQHSQRHSSTNLLQEGL-GSHRTQVPHLSLGPRPPTPPCAVTKTLSASHRTCYLVT 500 510 480 490 /usr/t H-

/usr/t H-. gi(370 QL

Elapsed time: 0:00:00

Blast Rosult

4/15/03 11:45 AM



Blast 2 Sequ nces results

Entrez

BLAST

OMIM

Taxonomy

Structure

BLAST 2 SEQUENCES RESULTS VERSION BLASTP 2.2.5 [Nov-16-2002]

Matrix BLOSUM62 gap open: 11 gap extension: 1 x dropoff: 50 expect 10.00 wordsize: 3 Filter Allgn

Sequence 1 gi 3702836 proton-gated cation channel subunit [Homo sapiens] Length 531
Sequence 2 gi 12643353 P2X purinoceptor 2 (ATP receptor) (P2X2) (Purinergic receptor) Length 471
No significant similarity was found

4/15/03 1:50 PM

Align two sequences

Tue Apr 15 18:49:23 BST 2003

```
/usr/tmp/seq1.215975.sca : 472 aa
>gi|1352688|sp|P49653|P2X2_RAT P2X purinoceptor 2
                                                                                                              472 aa vs.
>gi|3702836|gb|AAC62935.1| hASIC3 [Homo sapiens],
scoring matrix: , gap penalties: -12/-2
17.1% identity; Global alignment score: -108
.: .: .:
                                                                                   gi|370 MKPTSGPEEARRQPSDIRVFASNCSMHGLGHVFGPGSLSLR-RGMWAAAVVLSVATFLYQ
                                10
                                                                          30
                                                                                           70
                                                                                                                80
/usr/t V-----WYVFIVQKSYQDSETG----PESSI--ITKVKGITMSEDKV-WDVEEYV--KP
                              gi;370 vaervryyrefhhqtaldereshrlyfpavtlcninplrrsrltpndlhwagsallgldp
                                                                            90
                                                     110
                                                                          120
/usr/t PEGGSVVSIITRIEVTPSQTLGTCPESMRVHSSTCHSDDDCIAGQLDMQGNGIRTGHCVP
                The second section is a second section of the second section of the second section is a second section of the second section of the second section sec
gil370 Aehaaflralgrpfappgfmpsptfdmaqlyaraghslddml---ldcr---frgqpcgp
           120
                                130
                                160
                                                      170
                                                                                     180
/usi/t YYHGDSKTCEVSAWCPVEDGTSDNHFL----GKMAPNFTIL--IKNSIHYPKFKFSKGN
                                         gil370 ENF--TTIFTRMGKCYTFNSGADGAELLTTTRGGMGNGLDIMLDVQQEEYLPVWR---DN
                            180
                                                                                           210
                          210
                                               220
/usi/t IASQKSDYLKHCTFDQDSDPYCP1FRLGFIVEKAGENFTELAHKGGVIGVIINWNCDLDL
                                             ... : : .:. : . ....
gil370 EETPFEVGIRVQIRSQEEPPI--IDQLGLGVSPGYQTFVSCQQQQLSF-LPPPWG---DC
                                  240
                                                           250
                                               280
                                                                    290
                                                                                                300
/usr/t sesecnpkysfrrldpkydpassgynfrfakyyking---TTTTRTLIKAYGIRIDVIVH
                 gi|370 SSASLNPNYEPEPSDPLGSPSPSP----SPPYTLMGCRLACETRYVARKCGCRM-VYMP
                          290
                                                                             350
                                                                                                  360
                                                                                                                       370
 /usi/t GQAGKFSLIPTIINLATALTSI-GVGSFLCDWILLTFMNKNKLYSHKKFDKVRTPKHPSS
                                                  : : :
                                                                                                    gi|370 GDVPVCSPQQYKNCAHPAIDAILRKDSCACPNPCASTR----YA-KELSMVRIPSRAAA
                                       350
                                                                                                                                        390
```

Sequence Alignment Output

420 400 390 380 . .: :-: . .: .: : : : : : : : : g1|370 RFLARKINRSEAYIAENVLALDIFFEALNYETVEQKKAYEMSELLGDIGGQMGLFIGASL 430 420 410 450 440 /usr/t PLAVQS-PRPCSI-----SALTEQVVDTLGQH-----MGQRPPVP .: :::.; : g1|370 LTILEILDYLCEVFRDKVLGYFWNRQHSQRHSSTNLLQEGLGSHRTQVPHLSLGPRPPTP 490 480 470 460 470 460 /usr/t epsoodststdpkg---LAQL . :.. . gi | 370 PCAVTKTLSASHRTCYLVTQL 520 Elapsed time: 0:00:00